

Exhibit Q

Del I. Hawkins*

University of Oregon

The Impact of Sponsor Identification and Direct Disclosure of Respondent Rights on the Quantity and Quality of Mail Survey Data

Introduction

The importance of ethical issues in marketing research has been discussed recently by several writers in the field (Tybout and Zaltman 1974; Zaltman and Burger 1975; Tull and Hawkins 1976). While these discussions have generated some debate (Day 1975; Tybout and Zaltman 1975), empirical investigations of the consequences of conforming to various proposed standards have been limited (Singer 1978a, 1978b).¹ This does not necessarily mean that a negative answer has been given to Tybout and Zaltman's (1975) final question, "Is it possible or feasible to conduct systematic research on the practical relevance of ethics in marketing research?" This study represents a modest contribution to such a systematic body of research.

The need for research on ethical issues has been adequately developed (Tybout and Zaltman 1974; Zaltman and Burger 1975; Tull and Hawkins 1976). Two basic reasons emerge. One is that current practices may be influencing the ob-

This study focuses on the impact of sponsor identification and disclosure of respondent's right to refuse to participate on the quantity and quality of data generated in a commercial store image mail survey. Sponsor identification affects the overall response rate. Disclosure of the respondent's right to refuse to participate appears to influence response rate only when a department store is identified as the survey sponsor. Neither treatment appears to have a major effect on the nature of the obtained responses.

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1. The National Science Foundation, the American Statistical Association, and the Bureau of the Census have also become active in this area, see Goldfield et al. (1977).

tained data in unknown ways. The second is that practices with unknown effects may be imposed on the profession from the outside unless the profession itself develops meaningful guidelines.

For example, the Federal Trade Commission recently made the following statement concerning the use of invisible codes on questionnaires: "The Commission has reason to believe that it is an unfair or deceptive act or practice, violative of Section Five of the FTC Act (15 U.S.C. 45) to induce consumers to provide information about themselves by expressly or implicitly promising that such information is being provided anonymously, when, in fact, a secret or invisible code is used on the survey form or return envelope that allows identification of the consumer who has provided the information" (Federal Trade Commission 1978). In this case, research conducted after the FTC began their investigations suggested that visible coding would produce the same benefits as invisible coding without any ethical or legal problems (Erdos and Regier 1977).

Rationale for Current Study

This study focuses upon two separate issues. The first issue is the impact of sponsor identification on the response rate and the nature of the obtained responses. Clients are frequently reluctant to be identified as the sponsor of a survey. The two main reasons for this reluctance are to minimize competitor's knowledge of the firm's activities and to minimize the probability of subjects' role playing or responding to the sponsor rather than to the questions. In addition, there is some evidence to suggest that identifying commercial sponsors may produce a lowered response rate (Peterson 1975; Houston and Nevin 1977; Vocino 1977; Jones and Linda 1978). However, respondents cannot give informed consent to participate unless they know who will receive the information and how it will be used.

Informed consent is increasingly being regarded as a necessary part of a respondent's rights. For example, the Privacy Act of 1974 requires that each individual respondent in a federal government survey be explicitly informed, both verbally and in writing: (1) whether the survey is voluntary or mandatory, (2) the purpose of the survey, (3) how the information is to be used, and (4) the consequences to the individual of not participating in the survey (Goldfield et al. 1977).

It is probable that legal requirements for sponsor identification will be discussed at the state, if not the federal, level in the next few years. The profession must be in a position to participate in these discussions in an informed manner. Day's (1975) contention that the common practice of withholding or disguising the sponsor is done "to prevent bias by the respondent," while undoubtedly correct, will not carry much weight in legislative or regulatory debate on the practice. Em-

pirical evidence, systematically collected across a variety of situations, can serve to guide both the profession and those responsible for regulatory practices.

The second issue addressed in this study is the respondent's awareness of their right to refuse to participate or to skip particular questions. Day (1975) claims that it is "unrealistic to say—*in the context of survey research*—that potential respondents may be unaware of their right to refuse" (p. 232). However, unsupported claims of this nature are unlikely to impress nonresearchers who are more concerned with respondent rights than with nonresponse errors. Furthermore, current practices designed to minimize refusal rates may introduce bias (Tybout and Zaltman 1975). That is, the general approach of "ask them to participate in the most persuasive way you can" may introduce response biases of an unknown magnitude.

There are two related research questions with respect to this issue. The first is: "What is the impact on the overall nonresponse rate and the item nonresponse rate when respondents' right to refuse to participate is clearly indicated?" The second question is: "How do the obtained responses differ between surveys using standard requests for cooperation and surveys which clearly indicate respondents' right to refuse to participate?" Both of these questions are examined in this study.

Methodology

The two major issues described above are investigated within the framework of a mail survey. The same issues could, and should, be investigated in other forms of surveys as well as within various experimental settings. A mail survey was selected as a first step because of (1) the importance of mail surveys in commercial marketing research, (2) the absence of previous work in this area compared to experimental settings which have received some attention (Tybout and Zaltman 1974), and (3) the interests of and opportunity for the investigator.

The survey focused on consumer images of three leading department stores in Eugene, Oregon; shopping patterns with respect to department stores; and demographics. The study was conducted in cooperation with and, in part, for one of the department stores. Thus, the experimental environment should satisfy Day's (1975) justified concern for "situations prevailing in the market research world."

Sample Selection

A systematic random sample of 930 Eugene residences was selected from the latest Eugene-Springfield telephone directory. Utilization of a telephone directory as the sampling frame introduces well-documented sources of frame error (Tull and Hawkins 1976). This is not critical for

this study for two reasons. First, telephone directories, though imperfect, are widely used as sampling frames in commercial research. The purpose of this study is to analyze the practical impact of various ways of resolving ethical issues in marketing research. Therefore, this study requires the use of a common sampling frame, not a perfect one. Second, the comparisons of interest are among subgroups from within the frame. It is not necessary to project the findings beyond the listed telephone subscribers.

The surveys were addressed to "Ms. _____" unless a *Mrs.* appeared in the directory. The cover letter explained that the survey was a study of women's attitudes. Households containing no female over 18 were asked to return the cover letter after checking a box labeled "No female over 18."

The original sample of 930 was randomly divided into six subgroups of 155 each. Each subgroup received a different treatment based on sponsor identification and the disclosure of the respondent's right to refuse to participate.

Questionnaire Design

The questionnaire design was similar to most image-shopping behavior-demographics type surveys. The first page was in the form of a cover letter (see Appendix A) which was not attached to the questionnaire proper. The second page was a set of instructions for answering the following three pages of semantic scale items. Pages 3-5 contained 15 semantic scales designed to measure the image of each of the three stores. The format of the semantic scales is shown in Appendix B. The final page of the questionnaire contained seven questions on shopping behaviors and six demographic questions.

Experimental Treatments

Two variables were manipulated in this study: (1) disclosure of respondents' right to refuse to participate, and (2) identification of the sponsor. Two levels of disclosure of respondent rights were used. The first level represents the standard approach taken in survey research. That is, no direct reference was made to the respondent's right to refuse to participate or to skip particular questions. The second level of disclosure of the respondent's right contained three direct statements of the respondent's right to refuse to participate. The first statement was placed at the end of the final paragraph in the cover letter (insert A in Appendix A) as follows: "However, we want to stress that your participation is strictly voluntary. You should feel free to ignore this entire request if you so desire or to answer only those questions which you want to answer."

The second statement of respondent rights appeared at the top of the final page of the questionnaire. The justification for these questions is shown below with the rights statement in parentheses: "The following

questions are designed to measure aspects of your shopping behavior. (You should feel free to skip any questions that you would prefer to not answer.)"

The final statement of respondent rights appeared three-fourths of the way down the final page of the questionnaire (immediately preceding the demographic questions). The justification for these questions is shown below with the rights statement in parentheses: "Now so that we may compare the attitudes and behaviors of different groups of people, we would like to ask you a few individual questions. (You may, of course, skip any questions that you prefer to not answer.)"

The second variable manipulated was the sponsor identification. Three different sponsors were utilized in the study. The Bureau of Business Research of the University of Oregon served as one sponsor. The sponsorship was identified by the letterhead and by the return address on the outgoing envelope and the address on the return envelope. The cover letter itself was identical to the one shown in Appendix A except for the letterhead and the following statement which appeared at insert B in Appendix A:² "Furthermore, your responses will not be given to any business firm."

A fictitious research firm, Attitude Research Associates, served as a second sponsor. Appendix A is the cover letter used in this treatment. The letterhead, the outgoing, and the return envelopes carried Attitude Research Associates' name and address. The actual sponsoring firm served as third sponsor. In this case, Attitude Research Associates was identified as the firm conducting the study but the department store was identified as the sponsor. This was accomplished by adding the following paragraph between the second and third paragraph of the basic cover letter (insert C in Appendix A): "This survey is sponsored by _____ Department Store. The results will be used by the store's management to develop more effective marketing strategies in order to better serve the Eugene community." Both the outgoing and return envelopes carried the name and address of the research firm rather than the sponsor. This reflects a common practice of a commercial research firm conducting a study for a client.

Combining the various levels of the two variables produces six treatment groups: (1) department store sponsor—standard disclosure, (2) department store sponsor—full disclosure, (3) research firm sponsor—standard disclosure, (4) research firm sponsor—full disclosure, (5) university sponsor—standard disclosure, and (6) university sponsor—full disclosure. The original sample of 930 was randomly divided into six groups and each treatment was randomly assigned to a group. The questionnaires were mailed to each group on the same day.

2. This part of the study was funded entirely by the Bureau of Business Research of the University of Oregon. Neither the individual nor the aggregate responses of those respondents who received this cover letter were revealed to anyone other than the researcher and his assistants.

Reminder postcards were sent to all members of each group five days after the first mailing. The letterheads on the postcards were consistent with the treatment groups. The appeal is shown below with the addition used for the full disclosure treatment shown in parentheses. "Several days ago we sent you a questionnaire concerning your attitudes about local shopping conditions. If you have already returned the questionnaire, we would like to thank you. If not, we would like to encourage you to complete and return the questionnaire. This is the only reminder we will be able to send. We have destroyed the mailing list and no longer have any record of your name. (While we would like to have your response, whether or not you respond is entirely up to you.)"

Results

Two aspects of the results are of interest. First, what impact do the treatments have on the response rate? This question involves both the overall response rate and the item response rate. Second, what impact do the treatments have on the nature of the obtained data? This question will be examined by focusing on the store image data.

Response Rate

Overall response rate.—Table 1 provides an overview of response rate to the questionnaire. Each subgroup initially consisted of 155 potential respondents. Since some questionnaires were not deliverable and at some addresses there were no females over 18, the effective sample for each group ranged from 135 to 142. These differences do not approach statistical significance. The individual group response rates varied from 24.3% to 46.7%, and the overall response rate was 38.8%.

As can be seen in table 1, the response rate was highest with the university identified as the sponsor and lowest with the department store identified. Although the data violate the assumptions of interval scales and equal cell sizes, ANOVA was applied using an arc sin transformation in the manner described by Rao (1965).³ Sponsor identification produced significant, $P < .001$, main effects; disclosure level produced marginal main effects, $P \approx .10$; and interaction effects were not statistically significant, $P \approx .20$.

The differences in response rate between individual treatment groups were explored using standard Z tests of the difference between two proportions. The differences in response rate for the department store-research firm and the department store-university comparisons were both statistically significant, $P < .001$. The difference between the research firm sponsor and the university were not statistically significant, $P = .33$, by the usual criteria, but were suggestive of a higher response to the university sponsor.

3. The procedures described by Kirk (1968) produced similar results.

TABLE 1 Response Rate by Sponsor Identification and Level of Disclosure

	Department Store		Research Firm		University	
	Standard	Disclosure	Standard	Disclosure	Standard	Disclosure
Original mailing	155	155	155	155	155	155
Not delivered	9	10	16	12	14	155
No female	6	5	4	1	6	12
Effective sample	140	140	135	142	135	6
Viable responses	49	34	58	57	63	137
Response percentage	35.0	24.3	43.0	40.1	46.7	61
Response percentage by sponsor type	29.6		41.5		44.5	
					45.6	

TABLE 2 Average Number of Nonresponses per Person by Treatment

Sponsor	Standard Disclosure	Full Disclosure	Combined
Department store	4.27	5.59	4.81
Research firm	3.81	3.75	3.77
University	2.48	3.36	2.91
Combined	3.45	4.01	3.71

The overall response rate to the full disclosure approach was 36.28 percent compared to 41.46 percent for the standard disclosure, $P \approx .13$. The higher response rate for the standard approach holds within each type of sponsor but the difference is significant, $P < .05$, only when the department store was identified as the sponsor.

Item response rate.—Having found significant effects on the overall response rate by both sponsor type and level of disclosure, the analysis of the item response rate becomes somewhat arbitrary. Since each treatment group produced differing overall response rates, differences in item response rates between the groups could reflect either additional treatment effects or differences in the nature of the individuals choosing to respond to each treatment. Thus, the results of the analysis are threatened by potential selection error. However, the analysis of responses and respondent characteristics presented in the next section suggests (but certainly does not prove) that selection error is not a significant problem.

Each questionnaire in the study contained 45 semantic scale items designed to measure store image (15 items per store \times 3 stores). The average number of nonresponses per individual in each treatment group was calculated and is shown in table 2.

The full disclosure treatment produced a higher average rate of item nonresponse than the standard approach for two of the three sponsors and for the combined groups. Comparisons across sponsor types indicate an increase in the item nonresponse rate as one moves from a university sponsor to a department store sponsor. However, an ANOVA based on the general linear models procedure (Barr et al. 1976) failed to show significant, $P < .25$, main or interaction effects.

An examination of the raw data reveals that item nonresponse is most closely related to the respondent's familiarity with the outlet and her understanding of the scale item. Over 45% of the total item nonresponses occurred in the evaluation of the store shopped the least by the respondents. Likewise, the most ambiguous scale item "FUN" accounted for approximately 10% of the total item nonresponse.

The nonresponse rates to four questions measuring preferred shopping location, shopping time, and importance of store characteristics are shown in table 3. ANOVA using Rao's (1968) procedures was

TABLE 3 Nonresponse Rates for Shopping Preference and Attitudes Questions

Question	Department Store			Sponsor		
	Disclosure	Standard	Research Firm	Disclosure	Standard	University
Shopping location preference	.15	.14		.11	.17	.20
Shopping time	.00	.10		.04	.07	.03
Most important store characteristic	.06	.14		.07	.04	.08
Second important store characteristic	.09	.16		.05	.05	.03

applied to the nonresponse rate to each question. Interaction effects were significant, $P < .05$, for all four questions. Full disclosure of respondent rights appeared to increase the nonresponse rate when the university was identified as the sponsor and to *decrease* the nonresponse rate when the commercial firm was identified as the sponsor. Main effects (sponsor) were significant, $P < .05$, on only the question concerning the most important store characteristic. Since multiple comparisons were made (four ANOVA tests on the four separate questions) one significant main effect could easily occur due to chance.

The final section of the questionnaire requested demographic data. Questions on the respondent's age, marital status, zip code, occupation, and spouse's occupation were asked. The response rate to all of these questions was quite high ($>95\%$), and neither the disclosure of the respondent's rights or the identification of the sponsor affected the response rate.

Nature of the Responses

The second major question of interest is: "What is the impact, if any, of the two treatments on the values of the obtained data?" The analysis of this question will focus on the store image data. However, the potential selection error described earlier could also affect these results.

The images of each store, as measured by the 15 semantic scales, were compared across the treatment groups by means of a 2×3 multivariate analysis of variance procedure (MANOVA). The MANOVA routine of the *Statistical Analysis System* (Barr et al. 1976) was used. No significant, $P < .10$, main or interaction effects were found in any of the three analyses (one for each store). Thus, those who responded to the various treatments reported similar images of the store.

Conclusions and Implications

One general conclusion, subject to the limitations imposed by the sample, seems justified. Identification of a department store as the sponsor in the manner done in this study reduces the response rate significantly from that obtained from a research firm or university sponsor. In addition, a definite statement of the respondent's right to refuse to participate has a significant negative impact on the response rate when a department store is identified as the sponsor. It appears to have only a limited impact with other sponsor types.

Why were these two results obtained? The department store identified as the sponsor is a high-quality, popular store. Perhaps a respondent feels something like this: "I have to pay for the products and services I receive from this store, why should I give them something for free?" A feeling such as this presumably would not exist for

an unknown research firm or for the university. If indeed this is the case, an incentive might eliminate the negative impact of the sponsor identification. Cash, gift certificates to the store in question, or other incentives should be tested for effectiveness under various types of sponsor identification.

The impact of the disclosure of respondent rights appears pronounced only when the potential respondents are already reluctant to complete the questionnaire. Thus, it may serve more as a rationalization for not completing the questionnaire than as a source of new information for the potential respondents.

Given the potential selection error, the remaining findings of the study must be considered as speculations rather than as conclusions. Isolating the impact of sponsor identification and/or full disclosure of respondent rights on item nonresponse or the nature of the obtained responses will require a situation in which a 100% response rate has been achieved. However, the data obtained in this study suggest the following two findings.

First, neither sponsor identification nor disclosure of respondent rights has a *major* influence on item nonresponse. The analysis of the nonresponses to the semantic differential items showed no main or interaction effects. Disclosure level did appear to interact with sponsor type to influence the response rate to the shopping questions. Response rates to demographic questions were unaffected by the treatments.

Second, neither sponsor identification nor disclosure of respondent rights appears to affect the values of the obtained responses. Thus, in this specific case, the same general conclusions concerning the stores' images would have been reached regardless of the sponsor's identity or the level of disclosure of respondent rights.

This study cannot claim to have explored even the tip of the iceberg. A vast amount of research is required to develop a reasonable understanding of the potential impact of various ethical considerations on the quantity and quality of research data. The conclusions suggested by this study are limited to mail surveys, to well-known department store sponsors, to particular ways of identifying both sponsors and respondent rights, and to other conditions as well.

The present study, in addition to providing a limited empirical finding, could serve as a viable model for a substantial body of research in this area. Academicians, commercial researchers, and research clients are all concerned with the ethical nature of the profession and with the quantity and quality of research information that can be generated. These two issues are clearly related. Most applied studies could test the impact of one or more ethical considerations at little or no extra cost. Furthermore, the results of these tests can be published without revealing any proprietary information.

This is exactly what this study involved. Information was collected

that was of direct use to the sponsor. In addition, several important ethical considerations were addressed. Ethical considerations are of crucial importance to the daily practice of both applied and basic marketing research. The need for empirical investigations is too great to be borne by academic researchers alone or by individual research firms. Instead, it will require a profession-wide effort involving academicians, commercial research firms, and research clients.

Appendix A

Basic Cover Letter

Will you do us a favor?

We are conducting a survey of Eugene residents. We want to learn how you feel about shopping and about some of the stores in Eugene. No one will try to sell or give you anything. We simply want to learn of your feelings about shopping and some of the Eugene stores.

[Insert C]

Your name was randomly selected from the Eugene telephone directory. Since you are not asked to identify yourself on the questionnaire, no one will ever be able to associate your answers with your name [Insert B] Therefore, please give us your candid opinions.

Please complete the enclosed questionnaire and return it in the stamped, enclosed envelope. In this survey, we are interested in the opinions of adult women. If there is no female over 18 years old in your household, please check the box at the bottom of this page and return this page in the enclosed envelope.

Your cooperation is greatly appreciated. [Insert A]

Thank you.

Bill Hopkins
Research Associate

No female over 18

Appendix B
Format of the Semantic Scales

	Store A				
	Very Inaccurate	Somewhat Inaccurate	Slightly Inaccurate	Slightly Accurate	Somewhat Accurate
Convenient parking	1	2	3	4	5
Fun	1	2	3	4	5
Has good sales	1	2	3	4	5
Helpful employees	1	2	3	4	5
Crowded	1	2	3	4	5
Honest advertising	1	2	3	4	5

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